

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
**WO 2005/009080 A1**

(51) International Patent Classification<sup>7</sup>: **H05B 3/56, 3/34**

(21) International Application Number:  
PCT/GB2004/003054

(22) International Filing Date: 14 July 2004 (14.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0316506.5 15 July 2003 (15.07.2003) GB

(71) Applicant (for all designated States except US): **THERMOCABLE (FLEXIBLE ELEMENTS) LIMITED**  
[GB/GB]; Pasture Lane, Clayton, Bradford, West Yorkshire BD14 6LU (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DANIELS, Michael**  
[GB/GB]; 43 Moorfield Drive, Baidlon, Shipley, West

Yorkshire BD17 6LL (GB). **WILKIE, Phillip** [GB/GB];  
Lowwood, Fennec Road, Baidlon, Shipley, West Yorkshire  
BD17 6SR (GB).

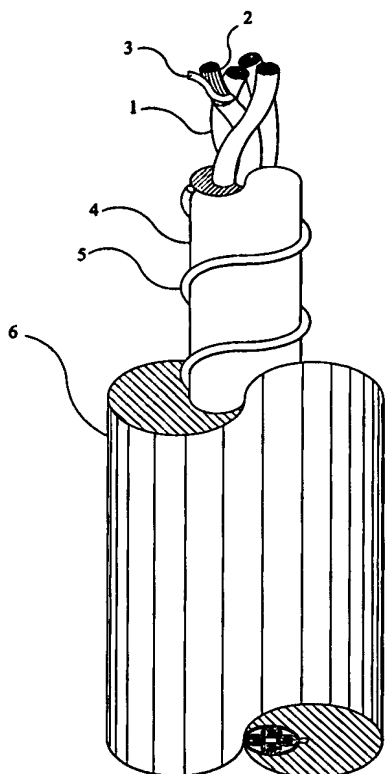
(74) Agent: **PARKINSON, Neil, Scott; Marks & Clerk,**  
Sussex House, 83-85 Mosley Street, Manchester M2 3LG  
(GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: **HEATING BLANKET**



(57) Abstract: A heating cable for use and for example a heating blanket. The heating cable comprises first (1) and second conductors (5) which extend along the length of the cable and which are separated by a separation layer (4). The conductors and separation layer may be coaxial. The first and second conductors are connected at one end of the cable in series such that if the first and second conductors are connected at the other end of the cable to respective poles of a power supply equal currents flow in opposite directions through adjacent portions of the conductors. This substantially eliminates electromagnetic radiation being emitted from the cable. The first conductor has a positive temperature characteristic and the separation layer has either a negative temperature characteristic or melts at a predetermined threshold temperature. The power supplied to the cable may be modulated in response to variations in the end to end resistance of the positive temperature co-efficient conductor. The power supplied to the cable may be terminated in the event of current flowing through the separation layer exceeding a predetermined threshold.

WO 2005/009080 A1

**Published:**

***For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.***

- of inventorship (Rule 4.17(iv)) for US only